

A P P E N D I X I:

THE LISTING OF CLAIMS:

1. (currently amended) An apparatus for transporting a polymer dispersion, comprising an impeller {28}, surrounded by a housing {30} or protruding freely into the polymer dispersion, said impeller having a shaft hub {1} and a number of individual curved vanes {2} freely mounted on the shaft hub {1}, to create pumping spaces {5, 25} on the front side {7} and rear side {8} of the curved vanes {2} of the impeller {28}, wherein the pumping spaces are so formed as to move the polymer dispersion through the pumping spaces with a uniform flow, and wherein the apparatus may be driven by a drive wherein the entire impeller is provided with a conductive PFA coating.
2. (previously presented) The apparatus for transporting as claimed in claim 1, wherein the angle of entry into the pumping spaces lies between 30° and 120°.
3. (previously presented) The apparatus for transporting as claimed in claim 2, wherein the angle of entry into the pumping spaces is 90°.
4. (canceled)
5. (currently amended) The apparatus for transporting as claimed in claim 1, wherein the curved vanes {2} bounding the pumping spaces {5, 25} have the same path of curvature on the front side {7} and rear side {8}.
6. (currently amended) The apparatus for transporting as claimed in claim 5, wherein the curved vanes {2} have the same radius of curvature {9, 21} on the front side {7} and rear side {8}.
7. (currently amended) The apparatus for transporting as claimed in claim 1, wherein the center line {11} of the curved vanes {2} on the impeller {28} describe a segment of a circle between the enveloping curve {6} and the center of the hub {1}.
8. (currently amended) The apparatus for transporting as claimed in claim 1, wherein the edges of the curved vanes {2} of the impeller {28} are of a rounded form.

9. (currently amended) The apparatus for transporting as claimed in claim 1, wherein the ratio of the vane width ~~(4)~~ to the vane thickness ~~(3)~~ is >1 .
10. (currently amended) The apparatus for transporting as claimed in claim 1, wherein the enveloping curve ~~(6)~~ of the impeller ~~(28)~~ is surrounded by a spiral housing ~~(30)~~.
11. (currently amended) An impeller for transporting a polymer dispersion, comprising a shaft hub ~~(1)~~ and a number of individual curved vanes ~~(2)~~ freely mounted on the shaft hub ~~(1)~~ of the impeller ~~(28)~~ to create pumping spaces ~~(5, 25)~~ on the front side ~~(7)~~ and rear side ~~(8)~~ of the curved vanes ~~(2)~~ of the impeller ~~(28)~~, wherein the pumping spaces are so formed as to move the polymer dispersion through with a uniform flow, ~~and~~ wherein the impeller is driven by a drive, and wherein the entire impeller is provided with a conductive PFA coating.
12. (currently amended) An impeller for transporting a medium, comprising a shaft hub ~~(1)~~ and a number of individual curved vanes ~~(2)~~ freely mounted on the shaft hub ~~(1)~~ of the impeller ~~(28)~~ to create pumping spaces ~~(5, 25)~~ on the front side ~~(7)~~ and rear side ~~(8)~~ of the curved vanes ~~(2)~~ of the impeller ~~(28)~~, wherein the pumping spaces are so formed as to move the ~~polymer dispersion~~ medium through with a uniform flow, and wherein the impeller is driven by a drive, and may be surrounded by a housing or may protrude into the medium, and wherein the entire impeller is provided with a conductive PFA coating.
13. (canceled)
14. (new) The apparatus for transporting as claimed in claim 1, wherein each of the vanes has bevels in the region where the vane is mounted on the shaft hub.
15. (new) The apparatus for transporting as claimed in claim 14, wherein the bevels of adjacent vanes and optionally the shaft hub are formed to create a surface of the pumping space which is curved continuously in an inward direction relative to the interior of the shaft hub.
16. (new) The impeller for transporting as claimed in claim 11, wherein each of the vanes has bevels in the region where the vane is mounted on the shaft hub.

17. (new) The impeller for transporting as claimed in claim 16, wherein the bevels of adjacent vanes and optionally the shaft hub are formed to create a surface of the pumping space which is curved continuously in an inward direction relative to the interior of the shaft hub.
18. (new) The impeller for transporting as claimed in claim 12, wherein each of the vanes has bevels in the region where the vane is mounted on the shaft hub.
19. (new) The impeller for transporting as claimed in claim 18, wherein the bevels of adjacent vanes and optionally the shaft hub are formed to create a surface of the pumping space which is curved continuously in an inward direction relative to the interior of the shaft hub.
20. (new) An apparatus for transporting a polymer dispersion, comprising an impeller, surrounded by a housing or protruding freely into the polymer dispersion, said impeller having a shaft hub and a number of individual curved vanes freely mounted on the shaft hub, to create pumping spaces on the front side and rear side of the curved vanes of the impeller, wherein each of the vanes has bevels in the region where the vane is mounted on the shaft hub, the bevels of adjacent vanes and optionally the shaft hub being formed to create a surface of the pumping spaces which is curved in an inward direction relative to the interior of the shaft hub in the area where the vane is mounted on the shaft hub so as to move the polymer dispersion through the pumping spaces with a uniform flow.
21. (new) An impeller for transporting a polymer dispersion, comprising a shaft hub and a number of individual curved vanes freely mounted on the shaft hub of the impeller to create pumping spaces on the front side and rear side of the curved vanes of the impeller, wherein each of the vanes has bevels in the region where the vane is mounted on the shaft hub, the bevels of adjacent vanes and optionally the shaft hub being formed to create a surface of the pumping spaces which is curved in an inward direction relative to the interior of the shaft hub in the area where the vane is mounted on the shaft hub so as to move the polymer dispersion through with a uniform flow, wherein the impeller is driven by a drive.

22. (new) An impeller for transporting a medium, comprising a shaft hub and a number of individual curved vanes freely mounted on the shaft hub of the impeller to create pumping spaces on the front side and rear side of the curved vanes of the impeller, wherein each of the vanes has bevels in the region where the vane is mounted on the shaft hub, the bevels of adjacent vanes and optionally the shaft hub being formed to create a surface of the pumping spaces which is curved in an inward direction relative to the interior of the shaft hub in the area where the vane is mounted on the shaft hub so as to move the medium through with a uniform flow, and wherein the impeller is driven by a drive, and may be surrounded by a housing or may proture into the medium.